



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10**

1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

OFFICE OF
ENVIRONMENTAL CLEANUP

February 25, 2011

Mr. Jim McKenna
Co-Chairman, Lower Willamette Group
1519 SW Columbia, Suite A
Portland, Oregon 97201

Mr. Bob Wyatt
Northwest Natural & Chairman, Lower Willamette Group
220 Northwest Second Avenue
Portland, Oregon 97209

Re: Portland Harbor Superfund Site, Administrative Order on Consent for Remedial Investigation and Feasibility Study; Docket No. CERCLA-10-2001-0240
Schedule for Remedial Investigation (RI) and Feasibility Study (FS)

Dear Messrs. McKenna and Wyatt:

On February 2, 2011, the Lower Willamette Group (LWG) requested a six month extension of the June 15, 2011 due date for the draft FS submittal. The letter also proposed a new schedule for delivery of a revised draft Remedial Investigation Report and revised draft Baseline Risk Assessment for Human Health and Ecology. We will address the schedule for each report separately, below.

This letter also provides EPA's response to the LWG's January 12, 2011 letter. That letter presented LWG's views on many of the same issues that were raised in its February 2, 2011 letter and described how the LWG will comply with the three directed comments in EPA's December 8, 2010 letter to: 1) move the RI data lockdown date from June 2008 to July 19, 2010; 2) draft the conceptual site model to link both current and historical sources to in-water contamination; and 3) include EPA PBDE fish tissue data in the BHHRA.

Baseline Human Health Risk Assessment (BHHRA)

In the February 2 letter, the LWG requested an extension date of June 15, 2011, to submit a revised draft BHHRA to EPA. EPA believes that this request is unreasonable and is directing the LWG to submit a revised draft BHHRA on May 2, 2011. EPA is also directing the LWG to provide the tables and calculations for the combined adult and child scenarios, evaluation of polybrominated biphenyl ethers (PBDEs), and breast milk scenarios by March 17, 2011 for EPA review and comment.

Basis for BHHRA Deadlines

1. On September 23, 2009, the LWG submitted a draft BHHRA to EPA.
2. In December 2009, EPA submitted preliminary comments to the LWG on the draft BHHRA that were determined to affect PRGs for development of a draft FS.
3. On July 19, 2010, EPA submitted a comprehensive comment set on the draft BHHRA and a revised draft was due within 90 days, October 14, 2010.
4. The only new exposure scenario that EPA required in the July 2010 comment set that affected the calculations in the draft BHHRA was combining the child and adult exposure scenarios. Although this was a new exposure scenario, the length of time the LWG has requested to revise the BHHRA is not warranted given the level of effort necessary to conduct the analysis of this scenario and incorporation into the BHHRA.
5. The LWG has been aware for several years that the inclusion of PBDEs in the revised draft BHHRA would be required. Inclusion of this information in the revised draft BHHRA does not warrant the requested schedule extension. Including PBDEs in the BHHRA was identified by EPA in December 2005 as a data gap. During development of Round 3B field sampling plans, EPA and the LWG agreed that EPA's Manchester Laboratory would perform the chemical analysis. The draft BHHRA presented an estimated maximum potential HQ of less than 1 for PBDEs using the maximum detected concentration for total PBDEs in the ODHS dataset (salmon, sturgeon and lamprey tissue) and the lowest RfD for any PBDE congener. EPA subsequently provided the results of the additional tissue analysis for carp and bass to the LWG on November 12, 2009. With the additional data analysis, EPA estimated that consuming fish contaminated with PBDEs resulted in hazard quotients ranging from 1 to 2. The LWG did not agree to include the PBDE data and evaluation in the BHHRA so on December 8, 2010, EPA directed the LWG to evaluate risks associated with PBDEs. EPA did not require the development of PRGs for PBDEs since tissue-sediment relationships have not been developed for PBDEs.
6. Including the breast feeding exposure scenario does not justify the requested schedule extension for submitting the BHHRA. EPA determined that this exposure should be included in the risk assessment in December 2005. EPA subsequently agreed with the LWG that this scenario would not be required for the draft BHHRA to allow EPA time to work with DEQ and EPA Headquarters and other regions on a methodology for evaluating this exposure scenario. A draft of DEQ guidance regarding this methodology was publicly available in May 2010 and finalized in October 2010. EPA informed the LWG that this methodology was to be used in revising the BHHRA in our July 2010 comments.
7. At the LWG's request, EPA agreed to extend the October 14, 2010 submittal deadline to engage in several meetings with the LWG regarding issues with comments on the draft BHHRA. The LWG provided a summary table showing resolution of the issues on November 17, 2010, and EPA advised the LWG of our determination that the vast majority of RI and Risk Assessment comments were resolved in our December 8, 2010 letter.

Baseline Ecological Risk Assessment (BERA)

In the February 2 letter, the LWG requested an extension date of July 27, 2011 to submit a revised draft BERA to EPA. EPA believes that this request is unreasonable and is directing the LWG to submit a revised draft BERA, including all associated models used to estimate risk, on July 5, 2011.

Basis for BERA Deadline

1. On September 2, 2009, the LWG submitted a draft BERA to EPA.
2. In December 2009, EPA submitted preliminary comments to the LWG on the draft BERA that were determined to affect PRGs for development of a draft FS.
3. On July 16, 2010, EPA submitted a comprehensive comment set on the draft BERA and required a revised draft BERA within 90 days, which was October 14, 2010.
4. The benthic risk evaluation was submitted separately from the draft BERA on November 13, 2009, and supporting information was provided January 20, 2010. EPA comments on the benthic risk evaluation, including an updated logistic regression model developed by Jay Field, were submitted separately to the LWG on September 27, 2010.
5. EPA agreed to extend the October 14, 2010 deadline at the LWG's request to engage in several meetings with the LWG regarding issues with the BERA comments and models. All significant issues regarding use of the LRM and EPA's comments were resolved in principle as of December 13, 2010. The benthic approach agreed to is documented in Attachment B to LWG's January 12, 2011 letter. EPA is in general agreement with the approach as described in Attachment B to the LWG's letter with some clarifications that are provided as an enclosure to this letter.

Remedial Investigation Report (RI)

In the February 2 letter, the LWG requested an extension date of September 28, 2011, to submit a revised draft RI to EPA. The LWG also expressed its desire not to have substantive or new comments provided by EPA on the revised draft. EPA cannot provide assurances that it will not make new comments or request revisions to the draft RI. However, one way that the likelihood of substantive new comments can be avoided is by submittal of the revised draft RI in phases to afford EPA the opportunity to review and comment, modify or direct changes to chapters of the revised draft RI prior to it being submitted in total form. Based on this review scenario and EPA's commitment to provide comments, modifications, or direction to the LWG within 30 days of submittal of each section (provided only one section is provided within a 30-day period; additional time will be required for EPA's review if multiple sections are provided), EPA agrees that the extension date of September 28, 2011, is reasonable and approved for submittal of the revised draft RI. EPA also agrees that, with the inclusion of the data sets identified in Attachment A to the LWG's January 12, 2011 letter, the data set for the RI is complete. EPA and LWG have also reached agreement on the path forward for the revision of the CSM directed comments, as documented in Gene Revelas' February 8, 2011 email.

EPA directs the LWG to submit a schedule commencing on March 21, 2011 and ending July 5, 2011 for submittal of the following preliminary revised sections, including all associated

tables, figures, maps, and appendices, of the revised draft RI by March 11, 2011 for EPA approval:

Section

Section 3: Current Environmental Setting

Section 4: Identification of Sources

Section 5: In-River Distribution of Contaminants

Section 6: Loading, Fate, and Transport for Select Indicator Contaminants

Section 7: Determination of Background Concentrations for Contaminants

Based on this schedule, the LWG shall provide the deliverables and should have ample time to resolve and incorporate EPA's comments, modifications or directions into the revised draft RI prior to a submittal date of September 28, 2011. If the LWG does not comply with this monthly submittal schedule, the entire revised RI Report will be due no later than August 1, 2011.

Development and Screening of Remedial Alternatives

Pursuant to the AOC (Section VII, Paragraph G) and the SOW (Section 9), the LWG was to provide under Task 7 a Development and Screening of Remedial Alternatives for the Portland Harbor Superfund Site. As noted in our December 21, 2010 letter, EPA agreed to check-in meetings in lieu of an alternatives screening document in the interest of expediting the project schedule. Per agreements with EPA, the LWG was to provide this deliverable, and additional information on FS tools, as a presentation, with supporting materials, in a check-in meeting on December 14, 2010. In our December 21, 2010 letter EPA notified the LWG that it had failed to meet this obligation under the AOC, for the reasons further described in that letter, because it had not provided the necessary content of the Alternatives Screening Check-in process. EPA also advised the LWG that in order to meet its obligations under the AOC the LWG must submit the alternative development and screening information that was not provided for the December 14, 2010 meeting. The LWG's February 2, 2010 letter did not respond to this issue or provide a submittal deadline specifically for an alternatives screening document. The LWG's proposed Portland Harbor RI/FS Schedule shows a line item for an FS Check-in with EPA on June 29, 2011, but it does not say that an alternatives screening would be submitted at this meeting, nor does a meeting alone meet the requirement for submittal of an alternatives screening deliverable.

As stated in our December 21 letter, the LWG is not in compliance with the AOC for failure to present the alternatives screening analysis in the December 14, 2010 meeting. EPA has not agreed to an extension to the December 14 deadline. In accordance with Section XIX., Paragraph 5.r., stipulated penalties are accruing on this late deliverable. The LWG should submit this deliverable as soon as possible, however, if the LWG submits the alternative screening analysis on or before April 1, 2011, EPA will use its discretion to waive imposition of stipulated penalties consistent with Section XIX, Paragraph 1. If the LWG refuses to submit a Development and Screening of Remedial Alternatives by April 12, 2011, EPA, in addition to assessing stipulated penalties may also take over the work or otherwise direct the LWG on the Alternatives for the FS.

As previously directed by EPA, the Alternatives Development and Screening must follow EPA's 1988 RI/FS guidance and 2005 Contaminated Sediment Remediation guidance and incorporate EPA's comments provided on December 18, 2009. To clarify EPA's expectations for this deliverable for Portland Harbor, the LWG is to first determine site-wide General Response Actions (GRAs), conduct a site-wide Technology Screen (TS) for the GRAs, and then assemble and screen site-wide Remedial Action Alternatives (RAAs). The LWG is then to evaluate each the site-wide GRAs, technologies, and alternatives for each of the AOPCs. EPA is not requiring the LWG to provide the results of the AOPC to SMA conversion as part of the alternatives screening deliverable; however, it is expected that the LWG will present the process for converting AOPCs to SMAs and provide examples using three (3) AOPCs at a meeting held on or before August 4, 2011 to ensure that EPA agrees with the methodology prior to the LWG submittal of a draft FS.

Basis for Alternatives Screen and Development Deadline

On November 17, 2009, the LWG presented examples of the Alternatives Development and Screening Evaluation. EPA provided comments on this presentation in a letter dated December 18, 2009. EPA also provided direction and guidance on the use of PRGs (April 2010) in the FS, CDF performance, standards (April 2010), approved the calibration of the QEAfate model (July 2010) and the mitigation framework (August 2010) which were identified by the LWG's consultants as critical path elements for the FS.

As stated in EPA's December 21, 2010, letter, the AOC, SOW, and original RI/FS Work Plan required the submittal of an alternatives screening document prior to the submittal of a draft FS. In place of this deliverable, EPA agreed to an alternatives screening check-in process with milestone dates that included two days of meetings: 1) December 7, 2010, to review the FS tools that would be used in the alternatives development, screening and evaluation; and 2) December 14, 2010, for presentation of the results of the alternatives development and screening evaluation. EPA agreed to these check-in meetings in lieu of submittal of a Development and Screening of Remedial Alternatives document in the interest of expediting the FS process and schedule, as desired by both parties.

The EPA and LWG jointly developed the structure and content of the meetings, which were documented and provided by the LWG on July 1, 2010 (*Draft Objectives, Agendas, and List of Topics to be Covered in Portland Harbor FS Alternatives Screening Check-in Process*). The LWG verified the purpose and content of the meetings during our project managers meeting on October 29, 2010, and the LWG's FS consultant indicated that they expected to provide advance meeting materials on November 18, 2010, for the FS Tools meeting and November 25, 2010, for the Alternatives Screening Check-in meeting. The LWG has had all of the necessary information to produce an alternatives screening analysis for well over a year. It is reasonable for the LWG provide this analysis immediately but no later than April 1, 2010.

Feasibility Study Report (FS)

In the February 2 letter, the LWG requested an extension date of December 14, 2011, to submit a draft FS to EPA. The LWG further states in its letter that this date is contingent upon EPA's conditional approval of the revised drafts of the RI, BHHRA, and BERA. EPA disagrees this linear approach is a necessity. The LWG previously did not think it was necessary either. However, we currently do not believe that the LWG would be able to meet the June 15, 2011 due date for the draft FS and EPA believes that the technical analysis for the FS would require more time than the remaining four (4) months. EPA therefore directs the LWG to produce a draft FS by November 15, 2011. Further, the LWG is to conduct a check-in meeting with EPA and partners on key FS elements, including RALs, as soon as possible, but no later than June 22, 2011. All documents for this check-in meeting shall be delivered to EPA at least 2 weeks prior to the scheduled meeting date.

As a reminder, it is LWG's responsibility to include all areas under early action evaluation in the draft Feasibility Study, including Terminal 4, Gasco/Siltronic, and Arkema. We expect that each LWG member working under an AOC is providing all information to the LWG for incorporation into the draft FS. The Harbor-wide FS must weigh alternatives wherever COCs are above acceptable risk levels. Specific information should also be solicited from each project including, but not limited to: the Terminal 4 final 60% design, Gasco/Siltronic EE/CA, and Arkema additional sediment core information. The early action work should help the LWG produce more robust alternatives analysis for these areas, and better cost estimates. The LWG should update this information as needed with the latest Harbor-wide context and process as necessary, for example, if dioxin/furans are of equal concern in weighing alternatives off of the Arkema Site. It should not be assumed that any of these early action processes will fully evaluate alternatives where contaminants may have been comingled downstream, which the Harbor-wide FS should again include wherever COCs are above acceptable risk levels.

Additionally, as we have discussed, it is EPA policy to enhance the environmental benefits of federal cleanup programs by promoting technologies and practices that are sustainable. Expectations for green cleanup and the policy itself are posted at: <http://yosemite.epa.gov/R10/extaff.nsf/programs/greencleanups>. Each remedial alternative should incorporate green remediation technologies. This should include consideration of green remediation factors for each alternative, including such factors as reporting and tracking specific quantities of materials reduced, reused, or recycled; carbon or greenhouse gas reductions; and water conserved or replenished. Use of these and other green remediation technologies will be standard unless a site-specific evaluation demonstrates impracticability or favors an alternative green approach. This policy does not fundamentally change how and why cleanup decisions are made, but calls for more sustainable methods of implementing cleanups. A comprehensive set of greener approaches to site cleanup may be found at www.clu-in.org/greenremediation and www.epa.gov/region09/cleanup-clean-air. Most emphatically, this policy is not intended to trade off environmental protectiveness for other benefits such as fewer carbon emissions. The FS should include an analysis of how efficiently each alternative can be implemented or how "green" it can be. The policy is not an invitation to state or argue the self-evident facts that doing less uses less energy or has a smaller carbon footprint, no action uses the least energy, or capping is less energy intensive than dredging.

Basis for Draft FS Deadline

For well over two years, EPA and the LWG have had an understanding to produce the draft FS concurrent with EPA's review of the draft RI and BRAs. Such concurrent development of an RI and FS is consistent with EPA RI/FS Guidance. Consequently, the EPA has worked with the LWG since early 2009 in scoping the FS and reaching agreements on key issues to allow the LWG to progress in development of the draft FS without finalizing the RI and BRAs. The EPA has put substantial resources into meeting with the LWG and reaching these agreements. The EPA worked with the LWG in early 2010 to develop an FS schedule which resulted in a draft deliverable due on June 15, 2011; this date was specified by EPA in a letter dated July 19, 2010. The LWG has already expended eight (8) months and has not even produced an Alternatives Development and Screening document or provided this information in a presentation. Both the AOC and the SOW do not require EPA approval of the RI or BRAs prior to development of a draft FS. Further, EPA's guidance discusses the parallel process of RI and FS development concurrently. EPA believes that the LWG has all the information necessary to produce a draft FS.

EPA understands that there are a lot of deliverables due this year; however, EPA believes that the LWG has ample time to develop these documents and further delays beyond those granted in this letter will not be accepted. EPA is concerned that the LWG's unwillingness to accept EPA's comments and desire to keep discussing the same issues they have with the comments in multiple meetings has only resulted in EPA having to direct the incorporation of information and schedule delays. Notwithstanding EPA's concerns, we still strongly advise the LWG to continue to coordinate its work on the draft RI, BRAs, and FS reports with EPA. EPA is willing to meet or provide additional guidance on specific issues on the overall process, as appropriate. In particular, EPA believes that continued discussions and exchange of key information will be beneficial in meeting our expectations for these deliverables.

If you have any questions regarding these matters, please contact Chip Humphrey at (503) 326-2678 or Kristine Koch at (206) 553-6705. All legal inquiries should be directed to Lori Cora at (206) 553-1115.

Sincerely,



for Chip Humphrey
Remedial Project Manager



Kristine Koch
Remedial Project Manager

Encl.

cc: Jim Anderson
Oregon Department of Environmental Quality

Rob Neely
National Oceanic and Atmospheric Administration

Ted Buerger
U.S. Department of Interior
U.S. Fish and Wildlife Service

Brian Cunninghame
Confederated Tribes of the Warm Springs Reservation of Oregon

Rose Longoria
Confederated Tribes and Bands of the Yakama Nation

Michael Karnosh
Confederated Tribes of the Grand Ronde Community of Oregon

Tom Downey
Confederated Tribes of the Siletz Indians

Audie Huber
Confederated Tribes of the Umatilla Indian Reservation

Erin Madden
Nez Perce Tribe

Greg Ulirsch
ATSDR

Kurt Burkholder
Oregon Department of Justice

David Farrer
Oregon Environmental Health Assessment Program

Rick Keppler
Oregon Department of Fish and Wildlife

EPA Clarifications to Resolution of EPA September 27, 2010 Comments on Benthic Risk Evaluation (submitted as Attachment B to the LWG's January 12, 2011 letter)

Note – items without EPA clarification are generally acceptable as written

1. The final bioassay hit classifications used to build the benthic toxicity models have been reconciled. These hit classifications differed in 27 out of 1,172 cases from the hit classifications used in the draft BERA. Twenty-five of the 27 differences were due to a change in data rounding procedures, requested by EPA. The other two changes were due to QC errors that have been corrected.

2. The LWG agrees to use the results from NOAA's new site-specific logistic regression model (LRM) in the revised draft BERA, with a P_{\max} threshold for predicting Level 2 bioassay hits of 0.50 and a P_{\max} threshold for predicting Level 3 hits of 0.59. The LWG has agreed to allow Jay Field (NOAA), as the principal developer of the new site-specific LRM, discretion to apply professional judgment in order to get a site-specific LRM that he considers to be most suitable for predicting benthic toxicity in Portland Harbor. Draft documentation for the new LRM was received from EPA on December 10, 2010. Windward reviewed the documentation and concluded that the documentation is sufficient as a draft. Windward will work with Jay Field (NOAA) to finalize the documentation for the revised BERA.

As you know, an error was discovered in the new LRM on December 15. The LWG does not anticipate that other errors will be discovered, but we are not in a position to ensure that. If another error were discovered it would be necessary to stop work and reassess the decision to use the LRM.

EPA clarification – regarding the second paragraph, Jay Field, the LRM model developer, notes that an error in the calculation for some individual models was discovered, and because that statistic was used in the selection of individual models, the model selection procedure was repeated. There was nothing inherently wrong with the original LRM, but the model developer wanted to be as consistent as possible with the procedure for selecting individual models that was outlined in the description of methods. This further illustrates that there is no “correct model”, but models that have different statistical performance or may rely on different sets of indicators to predict toxicity.

3. EPA agrees to use the LWG's individual endpoint floating percentile models (FPMs) with balanced false positive and false negative rates as a condition of resolving the outstanding benthic issues. EPA has given the LWG, as the principal developer of the new FPMs, discretion to apply professional judgment in order to get site-specific FPMs that it considers to be most suitable for predicting benthic toxicity in Portland Harbor, contingent on the objective of balancing false positive and false negative rates. Output from other model runs that yield unbalanced false positive and false negative rates will be presented in an attachment, for the expressed purpose of documenting the work that was done to identify the FPMs with balanced false positive and false negative rates. Those

other FPMs will not be used in the BERA. Draft documentation for the new FPMs was provided to EPA on December 1, 2010.

4. All four levels of benthic toxicity predictions will be presented in the BERA for each model (the LRM and the individual endpoint FPMs). EPA acknowledged that the Level 2 benthic toxicity predictions for the *Hyalella* biomass endpoint are unreliable, and instructed the LWG to report the false positive and false negative rates for that model (and the other models) along with the predictions. The LWG is allowed to objectively discuss the reliability of this endpoint in the risk characterization and to account for it in its risk management recommendations.

EPA clarification – EPA did not agree that the Level 2 toxicity predictions from Hyalella biomass are unreliable. EPA did acknowledge that they have uncertainties, that the LWG can objectively discuss the uncertainties in the risk characterization section of the BERA, and that EPA may agree to down weight the Hyalella biomass endpoint in any weight of evidence evaluation of risks.

5. EPA and the LWG recognize that the sediment quality guidelines produced by any model (LRM, FPM or generic SQGs such as PECs or PELs) are intended to be used as a set – not individually. Therefore, the reliability of and uncertainties associated with the set of chemical SQGs derived from each model will be presented and discussed for each set of SQGs and not for individual chemical SQGs within the set in the revised draft BERA.

6. The individual endpoint FPMs include SQGs for chemicals with insufficient data density or detection frequency to interpolate. Exceedances of those SQGs are to be mapped on a point-by-point basis.

7. Both the LRM and the FPMs include conventional parameters, but in different ways. The FPMs include SQGs for conventional parameters. The LRM uses conventional parameters to predict toxicity in combination with hazardous chemicals (e.g., organic carbon (OC)-normalized concentrations were used in the LRM for some chemicals, some chemicals' concentrations were multiplied by percent fines, and some chemicals' concentrations were both OC-normalized and multiplied by percent fines). The conventional SQG exceedances will be mapped and discussed as factors contributing to benthic toxicity in Portland Harbor. The implications of combining conventionals with hazardous substances will be examined as a source of uncertainty.

8. The generic SQGs that will be used moving ahead in the BERA are PECs and PELs (including mean quotients). This is based on EPA's verbal recommendation during our November-December 2010 meetings to resolve the benthic approach. TECs and TELs may still be used to define clean areas (as in the draft BERA). This represents a reduction in the number of generic SQG sets required to be used by EPA's BERA Problem Formulation.

The PECs and PELs will be used to confirm that the site-specific LRM and FPMs are better than generic SQGs at predicting benthic toxicity in Portland Harbor, based on a

comparison of false positive and false negative rates. Once that's been documented, the rest of the risk characterization will be based on the LRM and FPM SQGs.

EPA clarification - Exceedances of all SQGs from the FPM, LRM and generic SQGs for chemicals with insufficient data density and/or low detection frequencies insufficient to permit development of a toxicity predictive model are to be mapped on a point by point basis

9. EPA used false positive and false negative rates to evaluate benthic toxicity model reliability and reach resolution on the benthic approach to be used moving ahead in the BERA. This was in lieu of the other reliability statistics provided by EPA on September 29, 2010. In order to be consistent with the resolution, false positive and false negative rates will be focused on in lieu of the other reliability statistics moving ahead in the revised draft BERA, but all of the reliability statistics will be tabulated.

10. EPA and LWG agreed that benthic toxicity model validation is not feasible for Portland Harbor because the bioassay and chemistry data are all used to build and calibrate the models.

11. Moving into the FS, the LWG will use an updated version of the comprehensive benthic analysis that was presented to EPA on September 29, 2010 to define benthic AOPCs. The approach will be updated to use the final reconciled bioassay hit classifications and the benthic toxicity predictions from the revised draft BERA models (LRM and FPMs). The comprehensive benthic approach was designed to be consistent with EPA's April 21, 2010 guidelines for benthic analysis and is a weight-of-evidence approach. EPA's RPM reviewed the April 21 guidelines during the December 13 meeting and indicated that one of the guidelines – consider presence/absence of nearby sources – might not be adequately captured in the comprehensive benthic approach. After a brief discussion it was decided that the issue of whether presence/absence of nearby sources should affect any particular benthic AOPCs would be addressed in EPA comments on work products that present benthic AOPCs.

EPA clarification – this pertains to the approach for the FS since AOPCs are not defined in the ecological risk assessment. Also, the presence or absence of nearby sources does not enter into development of either the FPM or LRM, nor do they enter into the risk characterization section of the BERA. Discussion of presence or absence of sources has no direct bearing on the risk assessment, its conclusions or characterization of unacceptable ecological risks.

12. The benthic approach as described by these elements was developed through the cooperative effort of EPA and the LWG and resolves and supersedes EPA's September 27, 2010 comments on the draft benthic BERA.

EPA clarification – EPA interprets this statement to mean that the approach described resolves and supersedes those elements as they were discussed previously, and other aspects of the benthic toxicity approach not addressed in these elements are not superseded.